

REMARKS

In the Office Action, the Examiner rejected all of the then pending claims, which were Claims 1 and 3-20, under 35 U.S.C. 103 as being unpatentable over U.S. Patent 6,544,294 (Greenfield, et al.).

In this Amendment, claim 1 is being cancelled, and new independent Claim 21 is being added. New Claim 22, which is dependent from Claim 21, is being added to describe a preferred feature of the invention. Also, independent Claims 7, 13 and 19 are being amended to better define the subject matters of these claims. Claim 3 is being cancelled, and Claims 4 and 5 are being amended to be dependent from new Claim 22 instead of the now cancelled Claim 3.

For the reasons discussed below, Claims 4-22, which are now all of the pending claims, patentably distinguish over the prior art and are allowable. Accordingly, the Examiner is asked to reconsider and to withdraw the rejection of Claims 4-20 under 35 U.S.C. 103, and to allow these claims and new Claims 21 and 22.

The present invention relates to displaying tables having plural or multiple levels of headers, and in particular, the invention provides a comparatively simple way to move headers and columns within that table. With prior art procedures; this can be difficult and time consuming.

For instance, one common type of table, found in a variety of hardware/software computer systems, is referred to as a categorization table. This type of table organizes data under successive and expandable levels of headings, including main headings at a first level and sub-headings at a second level. With many conventional database management programs, it is difficult or time consuming to manage the data in data tables having multiple levels of headers.

One reason for this is because the top, or first level, headers may have different numbers of columns beneath them.

The present invention effectively addresses this issue. Generally, this is done, by using what is referred to as dummy tables to manage the positioning of the headers. With this invention, different levels of headers are put into different dummy tables. This allows each level of headers to be moved around independent of the other level of headers.

With a preferred embodiment of the invention, the entire display table is divided into a multitude of separately moveable dummy tables. This is done by forming a first dummy table including all of the main headers, forming a second dummy table including, for example, all of the sub-headers under one particular main header, and forming a third dummy table including all of the data columns of the table. Each of these data columns is associated with one of the main headers or one of the sub-headers. In addition, with this preferred embodiment, the main headers of the first dummy table are moveable within that table, the sub-headers of the second dummy table are moveable within that table, and the data columns of the third dummy table are moveable within that dummy table.

The first dummy table is positioned at a specified position on a display screen, the second dummy table is moved to a position adjacent that first dummy table, with the sub-headers directly beneath the associated main header. The third dummy table is positioned adjacent the second dummy table, with each data column directly beneath the associated main header or sub header. The dummy tables are displayed together at the same time and side-by-side at different locations on the same display screen to form a single composite table on that display screen.

Greenfield, et al, which is the only reference relied on by the Examiner, does not disclose or suggest the above-discussed use of dummy tables to manage the display table.

More specifically, Greenfield, et al. discloses a method and a system for creating graphical representations of events such as screenplays, speeches or multimedia works. This graphical representation visually displays a presentation metric of events and the temporal relationships between events. Events may be subsets of other events, and the graphical representations of the events may be moved around a display screen to show visually how the timing relationships between the events may be changed. Figure 10 of Greenfield, et al, which was specifically cited by the Examiner, shows a user interface screen having a time line display area and identifying a series of time related events, specifically acts and scenes of a play.

While Greenfield does create a hierarchical association between the elements that may be interpreted as columns, the hierarchical level associations are for a matter of visual representation manipulation of the size of the objects. The objects size can be magnified for viewing as a result of manipulation of the first presentation metric. The hierarchical associations of the present invention create a logical linkage relationship between the hierarchical levels of the columns and headers that enable the presentation of the data to be manipulated. The hierarchical levels allow the manipulation of the position of the higher hierarchical levels columns also cause a corresponding position change of all of the lower level columns. In the present invention, the presentation position of the lower level data columns move to a position determined by the relationship with higher level dummy table column header relocation flow.

In the Office Action, the Examiner noted that “Greenfield does not forcefully disclose a ‘dummy table’” (Office Action, page 3, lines 11 and 12), but the Examiner argued that the teachings of Greenfield, et al. provide a reasonable suggestion to create “dummy display” (Office Action, page 3, lines 15 and 16).

Applicants respectfully disagree. Applicants respectfully submit that the Examiner is applying the teaching of the present invention in hindsight to find and use dummy tables in the disclosure of Greenfield, et al.

It is important to note that the dummy tables of the present invention are real, visible tables. These dummy tables are not imaginary tables or hidden tables. The dummy tables of the instant invention include actual headers or data and are visible. The tables are “dummy” in the sense that each one, individually, is not the whole display table, and each one can be moved independently of the other dummy tables.

In the instant invention, the context of the term “dummy table” refers to a table entity that is not a complete table, but a table that is used within the table. In that context the dummy table within a table is used as infrastructure to link and manipulate the data columns within the table in conjunction with the associated headers of the “dummy table”. The Examiner description of how Greenfield applies suggests that a “dummy table” is merely an entity that is not populated with data at the time of creation. The Examiner’s explanation is treating the “dummy table” as a placeholder rather than a table within a table within a table.

Moreover, in accordance with the present invention, the dummy tables, together, form the entire display table. In this way, the entire display table can be re-arranged using only the dummy tables.

Independent Claims 7, 13, 19 and 21, as presented herewith, describe important features of the present invention that are not shown in or suggested by the prior art. In particular, new Claim 21 describes the feature of forming first, second and third dummy tables, where the first dummy table includes all of the main headers, the second dummy table includes all of the sub-headers of a group of sum-columns, and where the third dummy table includes all of the data columns of the display table. Claim 21 describes the additional features that the entire display table are divided into these three dummy tables, and that these dummy tables are moved to positions contiguous to each other to form a single composite table on a display screen

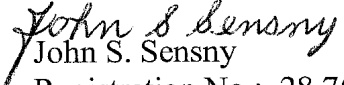
In addition, each of Claims 7, 13 and 19 describes a header dummy table holding headers of the original table, and a data dummy table holding the data cells of the original table. These claims, as amended herein, also describe the feature that a logical linkage relationship is created between the hierarchical levels of the columns and the headers to enable the presentation of the data to be manipulated.

The other references of record have been reviewed, and these other references, whether considered individually or in combination, also do not teach or suggest forming and using the dummy tables as described in Claims 7, 13, 19 and 21 as described above.

Because of the above-discussed differences between Claims 21, 7, 13 and 19 and the prior art, and because of the advantages associated with these differences, Claims 21, 7, 13 and 19 patentably distinguish over the prior art and are allowable. Claims 22 and 4-6 are dependent from Claim 21 and are allowable therewith; and Claims 8-12 are dependent from, and are allowable with, Claim 7. In addition, Claims 14-18 are dependent from Claim 13 and are allowable therewith; and Claim 20 is dependent from, and is allowable with, Claim 19.

The Examiner is, accordingly, asked to reconsider and to withdraw the rejection of Claims 4-20 under 35 U.S.C. 103 and to allow these claims and new Claims 21 and 22. If the Examiner believes that a telephone conference with Applicants Attorneys would be advantageous to the disposition of this case, the Examiner is requested to telephone the undersigned.

Respectfully submitted,


John S. Sensny
Registration No.: 28,757
Attorney for Applicants

Scully, Scott, Murphy & Presser, P.C.
400 Garden City Plaza – Suite 300
Garden City, New York 11530
(516) 742-4343

JSS:jy